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| 09/431,017      | 11/01/1999  | CLARE M. ANDERSON    | DAVOX-164XX         | 8138             |

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MANCHESTER, NH 03104

EXAMINER

NGUYEN, QUYNH H

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2642

DATE MAILED: 05/20/2004

15

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/431,017

Applicant(s)

ANDERSON ET AL.

Examiner

Quynh H Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Remarks filed 3/22/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,4-25 and 27-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-25, and 27-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: EXAMINER'S EXHIBIT A

### DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### ***Claim Rejections - 35 USC § 103***

2. Claims 1, 4-25, and 27-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carney (U.S. Patent 5,784,452) in view of Chee et al. (U.S. Patent 6,526,397).

Referring to claim 1, Carney teaches the steps of: establishing call center resource data corresponding to plurality of different resources such as queues (col. 1, lines 59-62), agent workgroups and individual agents (col. 2, lines 5-8), campaigns (col. 2, lines 8-11), and call tables (col. 1 lines 63-65 - system routing calls) available within call center; presenting to a user (Fig. 5, supervisor) plurality of different resources defined by resource data; assigning selected resources to a relationship profile (Telephony call center); assigning a relationship key field (Fig. 5, MC, Visa) corresponding to relationship profile to call center resource data for each of selected resources assigned to relationship profile (Telephony call center); using relationship key (Fig. 5, MC, Visa) field to manage call center; wherein call center resource data is organized by function into a plurality of resource categories including the steps of: presenting to user (Fig. 5, supervisor) plurality of resource categories; wherein the plurality of resources (col. 1, line 57 thru col. 2, line 11) within selected resource category are presented for selection by user; and wherein plurality of resource

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categories include queues (col. 1, lines 59-62), agent workgroups and individual agents (col. 2, lines 5-8), campaigns (col. 2, lines 8-11), and call tables (col. 1 lines 63-65 - system routing calls).

Carney does not teach receiving user selections of selected resources presented to user; and inbound dialed number identification service (DNIS) as one of the resource categories.

Chee et al. teach displaying a plurality of resource and receiving user input associated a selected resource with a selected resource requiring object (col. 1, lines 43-64). Chee et al. do not suggest a DNIS as one of the resource categories.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the features mentioned above, as taught by Chee, in Carney's system so that the user ("supervisor") would select among available resources to supervise agents in the call center. For example, the supervisor may move agents between work groups. Furthermore, inbound dialed number identification service (DNIS) is well known, the advantage of using this feature is also well known in call centers, and defined in Newton's Telecom Dictionary, sixth Edition, August 1993, page 326.

Referring to claim 4, Carney teaches using relationship key field to manage the call center includes: presenting a user ("supervisor") with plurality of statistics display options corresponding to a selected resource relationship profile (col. 5, lines 15-17); receiving a user selection of a selected statistics display option corresponding to a selected resource relationship profile (col. 5, lines 18-23); obtaining call center statistics

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from plurality of resources having a matching resource relationship key field matching a selected resource relationship key field of selected resource relationship profile (col. 5, lines 23-26); and displaying call center statistics from plurality of resources having matching resource relationship key field (col. 5, lines 28-30).

Claim 5 is rejected for the same reasons as claim 1. Furthermore, Carney teaches relationship key field is used to control defining of call center strategies (col. 4, lines 28-34 and col. 5, lines 5-14 and col. 6, lines 10-23).

Referring to claim 6, Carney teaches a computer-implemented method of managing strategies and actions in a call center comprising: establishing action detail data defining generic actions (col. 4, lines 31-32) that can be taken in call center; establishing goal data defining goals to be achieved within call center (col. 5, lines 10-14); presenting to a user generic actions defined by action detail data; and receiving at least one user selection of a selected generic action from generic actions limitations are rejected for the same reasons as discussed above with respect to claim 1. What is not taught by Carney is adding user defined action detail data to call center, goal data, and user-defined threshold for selected goal such that selected available action occurs when at least one user-defined threshold is reached.

Chee et al. teach the user may set escalating thresholds with a greater number of attention demanding events occurring with each higher threshold reached (col. 5, lines 35-50).

It would be obvious to one skilled in the art at the time the invention was made to incorporate the features mentioned above, as taught by Chee, in Carney's system, and

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further modify Chee's system to add user defined action detail data to call center, and to include some goals such as: number of calls answered, idle time, time spent talking to customers etc and user-defined threshold such as calls in a queue such that said user-selected available action (i.e. voice mail) will occur when user-defined threshold is met. These features are well known and the advantages of using them are also well known.

Referring to claims 7 and 8, Carney does not teach multiple thresholds including an optimization minimum, an optimization realization, and an optimization maximum wherein a user-selected available action is assigned to each multiple thresholds. Chee et al. teach the value of any instantaneous statistic can exceed a user-defined threshold (col. 5, lines 35-50). It would have been obvious to one skilled in the art at the time the invention was made to modify Chee's system to include multiple thresholds wherein a user-selected available action assigned to each multiple thresholds in order to assist supervisors to look at user-defined thresholds to see when agent's goals are met.

Claim 9 is rejected for the same reasons as discussed above with respect to claim 1. Furthermore, Carney teaches goals are organized in goal categories, and further including the step of: presenting goal (col. 5, lines 11-13) categories to user ("supervisor").

Referring to claims 10-12, Carney does not teach user-defined thresholds, and selected available actions are received and assigned to create library of strategy profile, and a plurality of available actions are created.

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Chee et al. teach the program control and processor to calculate cumulative statistics (col. 5, lines 53-67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the feature mentioned above, as taught by Chee, in Carney's system in order to have user-defined thresholds and view when agent's goals are met, organize strategies into library of strategy profiles, and create available actions so that user can easily selected and further modify the program control and processor that calculate cumulative statistics to a library of strategy profile.

Referring to claim 13, Carney teaches the steps of: establishing a plurality of resource relationship profiles (call center) defining a plurality of relationships between different call center resources and establishing a plurality of call center strategy profiles. However, Carney does not teach receiving call center statistic data pertaining to call center and displaying the data.

Chee et al. teach the processor calculates cumulative statistics for each skill set and displaying call center statistics data (col. 5, line 53 through col. 5, line 15).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the feature of displaying call center statistics data, as taught by Chee, in Carney's system in order to assist the supervisor to supervise the call center.

Referring to claims 14-24, Carney does not teach call center queue statistics data organized according to call center tasks, allow user to create and display a user-defined task statistics viewing formats of call center include summary statistics format

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and detailed graphical statistics format displayed in color. Chee et al. teach the flat monitor relaying capabilities to show statistics in color (col. 7, lines 48-62). It would be obvious to one of ordinary skill in the art at the time the invention was made to have call center queue statistics so that a manager can balance calls load and move agents around easily, display selected task statistics viewing option.

Referring to claim 25, Carney teaches the steps of: call center resource data defining a plurality of different call center resources such as agent workgroups (col. 2, lines 5-8), devices, queues (col. 1, lines 59-62), applications, campaigns (col. 2, lines 8-11), and call tables (col. 1 lines 63-65 - system routing calls) in call center; and a relationship manager (supervisor), responsive to a user input, for accessing said call center resource data, for creating a graphical user interface (col. 4, lines 35-36) presenting the plurality of different call center resources defined by said call center resource data to user, for assigning user-selected resources to a relationship profile (call center), and for associating a relationship key field to call center resource data corresponding to each of user-selected resources (col. 4, lines 28-39); wherein the plurality of different call center resources are organized into resource functional categories including agents, agent workgroups (col. 2, lines 5-8), devices, queues (col. 1, lines 59-62), applications, campaigns (col. 2, lines 8-11), and call tables (col. 1 lines 63-65 - system routing calls).

Referring to claims 27 and 36, Carney further teaches a call center resource relationship management system is implemented on at least one personal computer utilizing a WINDOS-based operating system (col. 3, lines 52-54).



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Claim 28 is rejected for the same reasons as discussed above with respect to claims 1 and 6. Furthermore, Carney discloses a call center strategy and action management system for use in a call center comprising: action detail data defining a plurality of generic actions (col. 4, lines 31-32) that can be taken within said call center; an action builder, responsive to a user input, for accessing action detail data, for creating a graphical user interface (col. 4, lines 35-36) presenting said generic actions to a user for selection, for combining user-defined specific action details with user-selected generic actions to build user-defined available actions in said call center (col. 4, lines 27-39); goal data defining goals to be achieved within call center (col. 5, lines 10-14); and a strategies manager, responsive to user input, for accessing goal data, for creating a graphical user interface (col. 4, lines 35-36).

Claims 29-32 are rejected for the same reasons as discussed above with respect to claims 7 and 8.

Claim 33 is rejected for the same reasons as discussed above with respect to claim 18. Furthermore, Carney teaches a call center management system for managing a call center including a plurality of different resources used for handling telephone calls, comprising: call center resource data defining a plurality of different call center resources such as queues (col. 1, lines 59-62), agent workgroups and individual agents (col. 2, lines 5-8), campaigns (col. 2, lines 8-11), and call tables (col. 1 lines 63-65 - system routing calls) in call center; and a relationship manager (supervisor), responsive to a user input, for accessing said call center resource data, for creating a graphical user interface (col. 4, lines 35-36) presenting said call center resources defined by said

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call center resource data to user for selection, for assigning user-selected resources to a relationship profile (call center), and for associating a relationship key field to call center resource data corresponding to each of user-selected resources (col. 4, lines 28-39); action detail data defining a plurality of generic actions (col. 4, lines 31-32) that can be taken within said call center; an action builder, responsive to a user input, for accessing action detail data, for creating a graphical user interface (col. 4, lines 35-36) presenting said generic actions to a user for selection, for combining user-defined specific action details with user-selected generic actions to build user-defined available actions in said call center (col. 4, lines 27-39); goal data defining goals to be achieved within call center (col. 5, lines 10-14); and a strategies manager, responsive to user input, for accessing goal data, for creating a graphical user interface (col. 4, lines 35-36).

3. Claims 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carney (U.S. Patent 5,784,452) in view of Chee et al. (U.S. Patent 6,526,397) and further in view of Clare et al. (U.S. Patent 5,465,286).

Referring to claim 34 and 35, Carney teaches the call center management system further including: statistics data representing statistics pertaining to resources in call center (col. 6, lines 24-28); and a statistics display manager, responsive to user input, for monitoring statistics (col. 3, lines 47-49) and for creating at least one graphical user interface (col. 4, lines 35-36). What is not taught by Carney is displaying statistics in at least one user-defined format based upon one of relationship profiles, wherein statistics display manager accesses strategy profiles, compares statistics with at least

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on user-defined threshold, and provides an indication in graphical user interface when threshold has not met. It would have been obvious to one of ordinary skill in the art at the time the invention was made is to have statistics display manager to take care of collecting statistics.

Clare et al. teach a system and method for supervising and automatic call distribution telephone system, wherein the prediction of pending abandonment of queued calls, pending loss of calls, and the potential financial impact of ending loss of calls are displayed (see Abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the features mentioned above, as taught by Clare, in Carney's system in order to assist supervisor in managing the call center.

#### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1, 4-25, and 27-36 have been considered but are moot in view of the new ground(s) of rejection.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quynh H. Nguyen whose telephone number is 703-305-5451. The examiner can normally be reached on Monday - Thursday from 6:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar, can be reached on (703) 305-4731. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

qhn

Quynh H. Nguyen  
May 13, 2004



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